

Fig. 1

TCGCCGCCACGACGCGCCAGCACCTCCGAGGACTGACCGACCTCCACGCGCGTCCCGA	60
ACACACTGCCACGCGCGCGCGCGCGCGCTCGCGCGGCACTCCCTCGCACGTCAACC	120
ACGTGCGCTGCCGCCAACGCCCTCCGCGCGCTTCCGGCTCTGATGCCTGAGCGAATCACA	180
GGCGAGCTCCCGGGAAGATCCCGCTCTGAGGCTCCGCCCCCGGACAGGGCCCCCGCCACC	240
TCAATAGCTCTTTTCCTCAGCGCGCCCCCTCCTTCTCGGCTCAACTAGGTCAGCGCAA	300
GGTGATCCCGGAGAGCGGGGGGGGACCGCTCCTCTGTACTTATCGAGCGCGCGC	360
TCCCTCCCGAGCCTCACACCCCTCGCTTCGCCCTTTTTCCTGTCAGGAACCTGGTT	420
CCCTCCCTTCTTCCACCTGCCCCACCTTCTCCAGAGATCCGACGTGGCGATTAGAGTT	480
CTCAGCGTCACACTGACTTCTAGGCAACTAGCCTAGACTGGAGCTGCGTGTGTGGGAAC	540
CCCGCGCAGTAGTTGAGCATCAGGCTCTTACCTTGGAGGTGGAGGGTGAGAAGAATAG	600
AGGAAGAAGGGATAAGTCAGAGGAGGGCCTGAACAACCTAGCCCCCTCTATTGGCCTGCTTT	660
GGGTGAGCAATTCAGTGAGTGTTTAAAAAAAAGGAGGGAACAAAGACCTCAG	720
GAGCAGTTTGTGTGTGTGTGCTGCTTCAAGAAGAAAATTCTAGACATTTATGCCCGC	780
AAGACCAAAGCTCAGCTAAGACTACTTCTCCCAAGAAGATAATTGTATCAGAGGATGGGT	840
TGGATCAGTACAGGTGTTGA GGA GAC GCT GAC AGA GGA CCA TGG AAA GGT GGG	895
Gly Asp Ala Asp Arg Gly Pro Trp Lys Gly Gly	11

Fig. 2

AGA GGA CGC GCG GCT CCT GGG CTT CCT CTG AGC TCA GCT CCA GGC ACC ACA	946
Arg Gly Arg Ala Ala Pro Gly Leu Pro Ser Ser Ala Pro Gly Thr Thr	28
AGG CCA CAT AAG GAG GGT GAG GTC CCT GGA GTG GAC TAC ATT TTC ATA ACC	997
Arg Pro His Lys Glu Gly Glu Val Pro Gly Val Asp Tyr Ile Phe Ile Thr	45
GTT GAG GAG TTT ATG GAA TTG GAG AAA AGT GGT GCT CTC CTA GAA AGC GGG	1048
Val Glu Glu Phe Met Glu Leu Glu Lys Ser Gly Ala Leu Leu Glu Ser Gly	62
ACC TAT GAA GAC AAC TAC TAC GGT ACC CCG AAG CCT CCA GCT GAA CCA GCA	1099
Thr Tyr Glu Asp Asn Tyr Tyr Gly Thr Pro lys Pro Pro Ala Glu Pro Ala	79
CCA TTA TTA AAT GTA ACA GAC CAG ATA CTT CCG GGA GCT ACT CCA AGT GCT	1150
Pro Leu Leu Asn Val Thr Asp Gln Ile Leu Pro Gly Ala Thr Pro Ser Ala	96
GAG GGG AAG CGG AAA AGA AAT AAG TCA GTG ACC AAC ATG GAG AAA GCA AGT	1201
Glu Gly Lys Arg Lys Arg Asn Lys Ser Val Thr Asn Met Glu Lys Ala Ser	113
ATA GAG CCT CCA GAG GAG GAA GAA GAA AGG CCT GTA GTC AAT GGA AAC	1252
Ile Glu Pro Pro Glu Glu Glu Glu Glu Arg Pro Val Val Asn Gly Asn	130
GGC GTG GTC ATA ACC CCA GAA TCC AGT GAA CAT GAA GAC AAA AGT GCA GGT	1303
Gly Val Val Ile Thr Pro Glu Ser Ser Glu His Glu Asp Lys Ser Ala Gly	147

Fig. 3

GCC TCA GGG GAG ACA CCC TCC CAG CCT TAC CCT GCA CCC GTG TAC AGC CAG 1354
 Ala Ser Gly Glu Thr Pro Ser Gln Pro Tyr Pro Ala Pro Val Tyr Ser Gln 164
 CCC GAA GAG CTC AAG GAC CAG ATG GAC GAT ACA AAG CCA ACA AAG CCT GAG 1405
 Pro Glu Glu Leu Lys Asp Gln Met Asp Asp Thr Lys Pro Thr Lys Pro Glu 181
 GAG AAC GAG GAC TCT GAT CCA TTG CCT GAT AAC TGG GAA ATG GCC TAC ACA 1456
 Glu Asn Glu Asp Ser Asp Pro Leu Pro Asp Asn Trp Glu Met Ala Tyr Thr 198
 GAG AAG GGG GAA GTC TAC TTC ATT GAC CAT AAC ACA AAG ACA ACA TCA TGG 1507
 Glu Lys Gly Glu Val Tyr Phe Ile Asp His Asn Thr Lys Thr Ser Trp 215
 CTG GAT CCG CGA CTT GCG AAA AAG GCT AAA CCT CCA GAA GAG TGC AAA GAA 1558
 Leu Asp Pro Arg Leu Ala Lys Lys Lys Ala Lys Pro Pro Glu Glu Cys Lys Glu 232
 AAT GAG CTT CCA TAT GGC TGG GAA AAA ATC GAT GAT CCT ATA TAT GGC ACT 1609
 Asn Glu Leu Pro Tyr Gly Trp Glu Lys Ile Asp Asp Pro Ile Tyr Gly Thr 249
 TAC TAT GTT GAC CAC ATA AAT AGA AGA ACA CAG TTT GAA AAC CCT GTC CTG 1660
 Tyr Tyr Val Asp His Ile Asn Arg Arg Thr Gln Phe Glu Asn Pro Val Leu 266
 GAA GCA AAA AGG AAG CTA CAG CAA CAT AAC ATG CCC CAC ACA GAA CTT GGA 1711
 Glu Ala Lys arg Lys Leu Gln Gln His Asn Met Pro His Thr Glu Leu Gly 283

Fig. 4

GCA AAG CCC CTG CAG GCC CCA GGT TTC CGA GAA AAG CCA CTC TTC ACC CGG 1762
 Ala Lys Pro Leu Gln Ala Pro Gly Phe Arg Glu Lys Pro Leu Phe Thr Arg 300
 GAT GCA TCC CAG TTG AAG GGA ACG TTC CTC AGC ACC ACC CTC AAA AAG AGC 1813
 Asp Ala Ser Gln Leu Lys Gly Thr Phe Leu Ser Thr Thr Leu Lys Lys Ser 317
 AAC ATG GGC TTT GGG TTT ACC ATA ATT GGT GGA GAC GAG CCG GAT GAG TTT 1864
 Asn Met Gly Phe Gly Phe Thr Ile Ile Gly Gly Asp Glu Pro Asp Glu Phe 334
 CTA CAG GTG AAA AGT GTG ATC CCG GAT GGG CCT GCC GCA CAG GAT GGG AAA 1915
 Leu Gln Val Lys Ser Val Ile Pro Asp Gly Pro Ala Ala Gln Asp Gly Lys 351
 ATG GAG ACA GGT GAT GTC ATT GTC TAT ATT AAT GAA GTT TGT GTC CTT GGA 1966
 Met Glu Thr Gly Asp Val Ile Val Tyr Ile Asn Glu Val Val Cys Val Leu Gly 368
 CAC ACT CAT GCA GAT GTT GTC AAA CTT TTC CAG TCT GTT CCT ATT GGT CAG 2017
 His Thr His Ala Asp Val Val Lys Leu Phe Gln Ser Val Pro Ile Gly Gln 385
 AGT GTC AAC TTG GTG TTG TGT CGT GGC TAC CCT TTG CCC TTT GAC CCT GAA 2068
 Ser Val Asn Leu Val Leu Cys Arg Gly Tyr Pro Leu Pro Phe Asp Pro Glu 402
 GAT CCT GCT AAC AGC ATG GTG CCA CCC CTT GCA ATA ATG GAG AGG CCA CCT 2119
 Asp Pro Ala Asn Ser Met Val Pro Pro Leu Ala Ile Met Glu Arg Pro Pro 419

Fig. 5

CCG GTG ATG GTC AAT GGA AGA CAT AAC TAT GAA ACA TAC TTG GAA TAC ATT	2170
Pro Val Met Val Asn Gly Arg His Asn Tyr Glu Thr Tyr Leu Glu Tyr Ile	436
TCT CGG ACC TCA CAG TCG GTC CCA GAT ATT ACA GAC CGG CCA CCT CAT TCT	2221
Ser Arg Thr Ser Ser Gln Ser Val Pro Asp Ile Thr Asp Arg Pro Pro His Ser	453
TTG CAC TCC ATG CCA GCT GAC GGC CAG CTA GAT GGC ACG TAT CCA CCA CCC	2272
Leu his Ser Met Pro Ala Asp Gly Gln Leu Asp Gly Thr Tyr Pro Pro Pro	470
GTC CAT GAC GAC AAT GTG TCT ATG GCT TCG TCT GGA GCC ACT CAA GCT GAA	2323
Val His Asp Asp Asn Val Ser Met Ala Ser Ser Gly Ala Thr Gln Ala Glu	487
CTT ATG ACC TTA ACC ATT GTG AAA GGT GCC CAG GGA TTT GGC TTT ACT ATT	2374
Leu Met Thr Leu Thr Ile Val Lys Gly Ala Gln Gly Phe Gly Phe Thr Ile	504
GCC GAC AGT CCC ACG GGA CAG CCG GTG AAA CAA ATC CTT GAC ATT CAG GGA	2425
Ala Asp Ser Pro Thr Gly Gln Arg Val Lys Gln Ile Leu Asp Ile Gln Gly	521
TGC CCT GGG CTG TGT GAA GGA GAC CTC ATT GTT GAG ATC AAC CAA CAG AAT	2476
Cys Pro Gly Leu Cys Glu Gly Asp Leu Ile Val Glu Ile Asn Gln Gln Asn	538
GTA CAG AAC CTG AGC CAT ACA GAA GTA GTG GAT ATA CTT AAG GAC TGC CCC	2527
Val Gln Asn Leu Ser His Thr Glu Val Val Asp Ile Leu Lys Asp Cys Pro	555

2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400

6/24

Fig. 6

GTT GGA AGT GAG ACT TCT TTA ATC CAT CGA GGA GGT TTC TTT TCT CCA 2578
 Val Gly Ser Glu Thr Ser Leu Ile Ile His Arg Gly Gly Phe Phe Ser Pro 572
 TGG AAA ACT CCA AAG CCT ATG ATG GAC CGA TGG GAG AAC CAA GGC AGT CCA 2629
 Trp Lys Thr Pro Lys Pro Met Met Asp Arg Trp Glu Asn Gln Gly Ser Pro 589
 CAA ACA AGT TTA TCT GCT CCG GCC GTC CCA CAG AAC CTG CCC TTC CCA CCT 2680
 Gln Thr Ser Leu Ser Ala Pro Ala Val Pro Gln Asn Leu Pro Phe Pro Pro 606
 GCC CTT CAC AGG AGC TCC TTT CCT GAT TCA ACA GAG GCC TTT GAC CCA CGG 2731
 Ala Leu His Arg Ser Ser Phe Pro Asp Ser Thr Glu Ala Phe Asp Pro Arg 623
 AAG CCT GAC CCA TAT GAG CTC TAC GAG AAA TCG AGA GCC ATT TAT GAA AGT 2782
 Lys Pro Asp Pro Tyr Glu Leu Tyr Glu Lys Ser Arg Ala Ile Tyr Glu Ser 640
 AGG CAA CAA GTG CCA CCC AGG ACC AGT TTT CGA ATG GAT TCC TCT GGT CCA 2833
 Arg Gln Gln Val Pro Pro Arg Thr Ser Phe Arg Met Asp Ser Ser Gly Pro 657
 GAT TAT AAG GAA CTG GAT GTT CAC CTT CGG AGG ATG GAG TCT GGA TTT GGC 2884
 Asp Tyr Lys Glu Leu Asp Val His Leu Arg Arg Met Glu Ser Gly Phe Gly 674
 TTT AGA ATC CTT GGG GGA GAT GAA CCT GGA CAG CCT ATT TTG ATC GGA GCC 2935
 Phe Arg Ile Leu Gly Gly Asp Glu Pro Gly Gln Pro Ile Leu Ile Gly Ala 691

207450-22372860

7/24

Fig. 7

GTC ATT GCC ATG GGC TCA GCT GAC AGA GAC GGC CGT CTA CAC CCA GGA GAT	2986
Val Ile Ala Met Gly Ser Ala Asp Arg Asp Gly Arg Leu His Pro Gly Asp	708
GAG CTT GTC TAT GTC GAT GGG ATC CCA GTG GCT GGC AAG ACC CAC CGC TAT	3037
Glu Leu Val Tyr Val Asp Gly Ile Pro Val Ala Gly Lys Thr His Arg Tyr	725
GTC ATC GAC CTC ATG CAC CAC GCG GCC CGC AAT GGG CAG GTT AAC CTC ACT	3088
Val Ile Asp Leu Met His His Ala Ala Arg Asn Gly Gln Val Asn Leu Thr	742
GTG AGA AGA AAG GTG CTA TGT GGA GGG GAG CCC TGC CCA GAG AAT GGG AGG	3139
Val Arg Arg Lys Val Leu Cys Gly Gly Pro Cys Pro Glu Asn Gly Arg	759
AGT CCA GGC TCT GTA TCA ACT CAC CAC AGC TCT CCG CGC AGT GAC TAT GCC	3190
Ser Pro Gly Ser Val Ser Thr His His Ser Ser Pro Arg Ser Asp Tyr Ala	776
ACC TAC TCC AAC AGC AAC CAC GGC GCC CCC AGC AGC AAT GCC TCA CCT CCT	3241
Thr Tyr Ser Asn Ser Asn His Ala Ala Pro Ser Ser Asn Ala Ser Pro Pro	793
GAA GGC TTT GCC TCA CAC AGC TTG CAG ACC AGT GAT GTG GTC ATT CAC CGC	3292
Glu Gly Phe Ala Ser His Ser Leu Gln Thr Ser Asp Val Val Ile His Arg	810
AAA GAA AAC GAA GGG TTT GGC TTC GTC ATC AGC TCT CTG AAC AGG CCT	3343
Lys Glu Asn Glu Gly Phe Gly Phe Val Ile Ser Ser Leu Asn Arg Pro	827

Fig. 8

GAG TCT GGA GCC ACC ATA ACT GTG CCC CAT AAA ATT GGA CGA ATC ATT GAT	3394
Glu Ser Gly Ala Thr Ile Thr Val Pro His Lys Ile Gly Arg Ile Ile Asp	844
GGG AGC CCT GCA GAT CGC TGT GCC AAA CTC AAA GTG GGC GAC CGT ATC TTA	3445
Gly Ser Pro Ala Asp Arg Cys Ala Lys Leu Lys Val Gly Asp Arg Ile Leu	861
GCA GTC AAC GGC CAG TCT ATC ATC AAC ATG CCT CAC GCT GAC ATT GTG AAG	3496
Ala Val Asn Gly Gln Ser Ile Ile Asn Met Pro His Ala Asp Ile Val Lys	878
CTC ATC AAG GAC GCC GGT CTC AGT GTC ACC CTT CGC ATC ATT CCT CAG GAG	3547
Leu Ile Lys Asp Ala Gly Leu Ser Val Thr Leu Arg Ile Ile Pro Gln Glu	895
GAG CTC AAC AGC CCA ACA TCA GCA CCC AGT TCA GAG AAA CAG AGC CCC ATG	3598
Glu Leu Asn Ser Pro Thr Ser Ala Pro Ser Ser Glu Lys Gln Ser Pro Met	912
GCC CAG CAG CAC AGC CCT CTG GCC CAG CAG AGT CCT CTG GCC CAG CCA AGC	3649
Ala Gln Gln His Ser Pro Leu Ala Gln Gln Ser Pro Leu Ala Gln Pro Ser	929
CCC GCC ACC CCC AAC AGC CCA CCA GTC GCA CAG CCA GCT CCT CCC CAA CCT	3700
Pro Ala Thr Pro Asn Ser Pro Val Ala Gln Pro Ala Pro Pro Gln Pro Leu	946
CAG CTG CAA GGA CAC GAA AAT AGT TAC AGG TCA GAA GTT AAA GCG AGG CAA	3751
Gln Leu Gln Gly His Glu Asn Ser Tyr Arg Ser Glu Val Lys Ala Arg Gln	963

Fig. 9

GAT GTG AAG CCA GAC ATC CGG CAG CCT CCC TTC ACA GAC TAC AGG CAG CCC 3802
 Asp Val Lys Pro Asp Ile Arg Gln Pro Pro Phe Thr Asp Tyr Arg Gln Pro 980
 CCG CTG GAC TAC AGG CAG CCC CCG GGA GAC TAC TCA CAG CCC CCA CCC 3853
 Pro Leu Asp Tyr Arg Gln Pro Pro Gly Gly Asp Tyr Ser Gln Pro Pro Pro 997
 TTG GAC TAC AGG CAG CAC TCT CCA GAC ACC AGG CAG TAC CCT CTG TCA GAC 3904
 Leu Asp Tyr Arg Gln His Ser Pro Asp Tyr Arg Gln Tyr Pro Leu Ser Asp 1014
 TAC AGG CAG CCA CAG GAT TTT GAT TAT TTC ACT GTG GAC ATG CAG AAA GGA 3955
 Tyr Arg Gln Pro Gln Asp Phe Asp Tyr Phe Thr Val Asp Met Glu Lys Gly 1031
 GCC AAA GGA TTT GGA TTC AGC ATT CGT GGA GGA AGG GAA TAC AAG ATG GAT 4006
 Ala Lys Gly Phe Gly Phe Ser Ile Arg Gly Gly Arg Glu Tyr Lys Met Asp 1048
 CTG TAT GTG TTG AGA TTG GCA GAG GAT GGG CCA GCC ATA AGG AAC GGC AGG 4057
 Leu Tyr Val Leu Arg Leu Ala Glu Asp Gly Pro Ala Ile Arg Asn Gly Arg 1065
 ATG AGG GTA GGA GAT CAG ATC ATT GAA ATA AAT GGG GAA AGC ACA CGA GAC 4108
 Met Arg Val Gly Asp Gln Ile Ile Glu Ile Asn Gly Glu Ser Thr Arg Asp 1082
 ATG ACC CAC GCC AGA GCA ATA GAA CTC ATC AAG TCT GGA GGA AGA AGA GTG 4159
 Met Thr His Ala Arg Ala Ile Glu Leu Ile Lys Ser Gly Gly Arg Arg Val 1099

Fig. 10

CGG CTG CTG AAG AGA GGC ACG GGG CAG GTC CCG GAG TAT GGA ATG GTA	4210
Arg Leu Leu Leu Lys Arg Gly Thr Gly Gln Val Pro Glu Tyr Gly Met Val	1116
CCT TCC AGC CTC TCC ATG TGC ATG AAA AGT GAC AAG CAT GGG TCC CCA TAT	4261
Pro Ser Ser Leu Ser Met Cys Met Lys Ser Asp Lys His Gly Ser Pro Tyr	1133
TTC TAC TTA CTG GGC CAC CCT AAA GAC ACG ACG AAC CCC ACG CCT GGA GTG	4312
Phe Tyr Leu Leu Gly His Pro Lys Asp Thr Thr Asn Pro Thr Pro Gly Val	1150
CTG CCG CTG CCG CCG CCC CAG GCC TGC CCG AAG TAGGCGTCTCCCTCGAAGACATC	4368
Leu Pro Leu Pro Pro Pro Gln Ala Cys Arg Lys	1161
CTCTCTCCATTCTCTCCATCACATCCAGCCCCACCTCCGACCCTTCCCACCAGATAGGC	4428
CCAGACCCAACTTGGGATATCCAAAGGGAACACGACGCTTAGGAAACCAAGAGCTTTCG	4488
GCCGGCGGCCAGAAAGCAGCGCCCTGGGGGAGCAGAGGGAGCGCTCGGCCAGCCCGCAG	4548
CGCAGTGGCGGCCAGGCTGGAGGAGGTGCCCGGGCCAGGGGGCCCCGAGGCCCGGC	4608
AGGCCCGCCTCGGAGCGGCCGACGGGAAGGAGCGCTGCGCGCGCGCGGTGAGGGCCTC	4668
GGGGCCCGCGCGCGGGAGGCCGAGGCCAAGTGCGGTGTGCGCTCGGGGGCCCCGACCC	4728
GCAGCGGGCCCCACGGGGGGGGCCCCAGCGCCCAAGCGCAGCATGGCGCGGGGCCCTGG	4788
AAGGTGCGGGCTCCGACAAAGTGCCTGGGGGGCCCCCTGCAGCCCTCGGGCCCCGGGC	4848

Fig. 11

4908 AGATGAGCCCAAGGCGAGGGCCCCCGCCGCTCCACGCAGGCCGATCTTCCTGGGTT
4968 CCGTCTCAGGCGTTTAAATTATTCCACTGTCACACGCATAGATCTATACGAGGCGCC
5028 GAAGCCCGGAGCGCCGCGTGCGACGCGGTAGGCGGCACGGCAGGTGTCCGCGCAGG
5088 CAGACCTAAACTGATCCTAAAGCCCCCGTTCCATGGTGGGAGCTTTGGCAGCTACGGAA
5148 GAACCAAAATCAGCAAAACATCACAGAGAGACAGTGCAGTGTAGCTTAGATTCAAAAAA
5156 AAAAAAA

Fig. 12

60 TCGCCGCCACGACGGGCCAGCACCTCCGAGGAGTACCGGACCTCCACGGCGCTCCCGA
120 ACACACTGCCACCGCCGCCGCCGCCGCGGCTCGGCGGCACTCCCTCGCACGTCACC
180 ACGTGCGCTCCCGCCCAACGCCTCCCGCGCGCTTCGGCTCTGATGCCTGAGCGAATCACA
240 GCGAGCTCCCGGAAGATCCCGCTCTGAGGCTCCGCCGCCCGGACAGGGCCCCGCCACC
300 TCATAGCTCTTTCCCTCAGCCGCCCTCCCTTCTCTCGGCTCAACTAGGTCAGCGCAA
360 GGTGATCCCGAGAGCGGGCGGGGACCGCTCCTCCTGTACTTATCGAGCGCGCGC
420 TCCCTCCCGAGCCTCACACCCCTCGCTTCGCCCTTTTTTCCACTGTCCAGGAACCTGGTT
480 CCCCTCCTCTCCACCTGCCCTACCTTCTCCAGAGATCCGACGTGGCGATTAGAGTT
540 CTCAGCGTCACACTGACTTCTAGGCAACTAGCCTAGACTGGAGCTGCGTGTGTGGGAAC
600 CCCGGGCAGTAGTTGAGCATCAGGCTCTTACCTTGGAGTGGAGGGTGAGAAGAATAG
660 AGGAAGAAGGATAAGTCAGAGGAGGCGCTGAACAACCTAGCCCCCTCTATTGGCCTGCTTT
720 GGGTGAGCATTCAGTGAGTGCTTTAAAAAAAAGGGAGGGAACAAAGACCTCAG
780 GAGCAGTTTGTGTGTGTGTCTGGCTTCAAGAAGAAAATTCTAGACATTTATGCCGGC
840 AAGACCAAGCTCAGCTAAGACTACTTCTCCCAAGAAGATAATTGTATCAGAGGATGGGT
900 TGGATCAGTACAGGTGGTTTGAGGAGACGCTGACAGAGGACCATGGAAGGTGGGAGAGG
960 ACGCGCGCTCCTGGGCTTCTCTGAGCTCAGCTCCAGGCACCACAAGGCCACATAAGGA

Fig. 13

GGGTGAGGTCCCTGGAGTGGACTACATTTTCATAACCGTTGAGGAGTTT ATG GAA TTG GAG 1021
Met Glu Leu Glu 4
AAA AGT GGT GCT CTC CTA GAA AGC GGG ACC TAT GAA GAC AAC TAC TAC GGT 1072
Lys Ser Gly Ala Leu Leu Glu Ser Gly Thr Tyr Glu Asp Asn Tyr Tyr Gly 21
ACC CCG AAG CCT CCA GCT GAA CCA CCA CCA TTA AAT GTA ACA GAC CAG 1123
Thr Pro lys Pro Pro Ala Glu Pro Ala Pro Leu Leu Asn Val Thr Asp Gln 38
ATA CTT CCG GGA GCT ACT CCA AGT GCT GAG GGG AAG CCG AAA AGA AAT AAG 1174
Ile Leu Pro Gly Ala Thr Pro Ser Ala Glu Gly Lys Arg Lys Arg Asn Lys 55
TCA GTG ACC AAC ATG GAG AAA GCA AGT ATA GAG CCT CCA GAG GAG GAA GAA 1225
Ser Val Thr Asn Met Glu Lys Ala Ser Ile Glu Pro Pro Glu Glu Glu Glu 72
GAA GAA AGG CCT GTA GTC AAT GGA AAC GGC GTG GTC ATA ACC CCA GAA TCC 1276
Glu Glu Arg Pro Val Val Asn Gly Asn Gly Val Val Ile Thr Pro Glu Ser 89
AGT GAA CAT GAA GAC AAA AGT GCA GGT GCC TCA GGG GAG ACA CCC TCC CAG 1327
Ser Glu His Glu Asp Lys Ser Ala Gly Ala Ser Gly Glu Thr Pro Ser Gln 106
CCT TAC CCT GCA CCC GTG TAC AGC CAG CCC GAA GAG CTC AAG GAC CAG ATG 1378
Pro Tyr Pro Ala Pro Val Tyr Ser Gln Pro Glu Glu Leu Lys Asp Gln Met 123

Fig. 14

GAC GAT ACA AAG CCA ACA AAG CCT GAG GAG AAC GAG GAC TCT GAT CCA TTG 1429
 Asp Asp Thr Lys Pro Thr Lys Pro Glu Glu Asn Glu Asp Ser Asp Pro Leu 140
 CCT GAT AAC TGG GAA ATG GCC TAC ACA GAG AAG GGG GAA GTC TAC TTC ATT 1480
 Pro Asp Asn Trp Glu Met Ala Tyr Thr Glu Lys Gly Glu Val Tyr Phe Ile 157
 GAC CAT AAC ACA AAG ACA ACA TCA TGG CTG GAT CCG CGA CTT GCG AAA AAG 1531
 Asp His Asn Thr Lys Thr Thr Ser Trp Leu Asp Pro Arg Leu Ala Lys Lys 174
 GCT AAA CCT CCA GAA GAG TGC AAA GAA AAT GAG CTT CCA TAT GGC TGG GAA 1582
 Ala Lys Pro Pro Glu Glu Cys Lys Glu Asn Glu Leu Pro Tyr Gly Trp Glu 191
 AAA ATC GAT GAT CCT ATA TAT GGC ACT TAC TAT GTT GAC CAC ATA AAT AGA 1633
 Lys Ile Asp Asp Pro Ile Tyr Gly Thr Tyr Tyr Val Asp His Ile Asn Arg 208
 AGA ACA CAG TTT GAA AAC CCT GTC CTG GAA GCA AAA AGG AAG CTA CAG CAA 1684
 Arg Thr Gln Phe Glu Asn Pro Val Leu Glu Ala Lys arg Lys Leu Gln Gln 225
 CAT AAC ATG CCC CAC ACA GAA CTT GGA GCA AAG CCC CTG CAG GCC CCA GGT 1735
 His Asn Met Pro His Thr Glu Leu Gly Ala Lys Pro Leu Gln Ala Pro Gly 242
 TTC CGA GAA AAG CCA CTC TTC ACC CGG GAT GCA TCC CAG TTG AAG GGA ACG 1786
 Phe Arg Glu Lys Pro Leu Phe Thr Arg Asp Ala Ser Gln Leu Lys Gly Thr 259

Fig. 15

TTC CTC AGC ACC ACC CTC AAA AAG AGC AAC ATG GGC TTT GGG TTT ACC ATA 1837
 Phe Leu Ser Thr Thr Leu Lys Lys Ser Asn Met Gly Phe Gly Phe Thr Ile 276
 ATT GGT GGA GAC GAG CCG GAT GAG TTT CTA CAG GTG AAA AGT GTG ATC CCG 1888
 Ile Gly Gly Asp Glu Pro Asp Glu Phe Leu Gln Val Lys Ser Val Ile Pro 293
 GAT GGG CCT GCC GCA CAG CAG GAT GGG AAA ATG GAG ACA GGT GAT GTC ATT GTC 1939
 Asp Gly Pro Ala Ala Gln Asp Gly Lys Met Glu Thr Gly Asp Val Ile Val 310
 TAT ATT AAT GAA GTT TGT GTC CTT GGA CAC ACT CAT GCA GAT GTT GTC AAA 1990
 Tyr Ile Asn Glu Val Cys Val Leu Gly His Thr His Ala Asp Val Val Lys 327
 CTT TTC CAG TCT GTT CCT ATT GGT CAG AGT GTC AAC TTG GTG TTG TGT CGT 2041
 Leu Phe Gln Ser Val Pro Ile Gly Gln Ser Val Asn Leu Val Leu Cys Arg 344
 GGC TAC CCT TTG CCC TTT GAC CCT GAA GAT CCT GCT AAC AGC ATG GTG CCA 2092
 Gly Tyr Pro Leu Pro Phe Asp Pro Glu Asp Pro Ala Asn Ser Met Val Pro 361
 CCC CTT GCA ATA ATG GAG AGG CCA CCT CCG GTG ATG GTC AAT GGA AGA CAT 2143
 Pro Leu Ala Ile Met Glu Arg Pro Pro Val Met Val Asn Gly Arg His 378
 AAC TAT GAA ACA TAC TTG GAA TAC ATT TCT CGG ACC TCA CAG TCG GTC CCA 2194
 Asn Tyr Glu Thr Tyr Leu Glu Tyr Ile Ser Arg Thr Ser Gln Ser Val Pro 395

Fig. 16

GAT ATT ACA GAC CGG CCA CCT CAT TCT TTG CAC TCC ATG CCA GCT GAC GGC 2245
 Asp Ile Thr Asp Arg Pro Pro His Ser Leu his Ser Met Pro Ala Asp Gly 412
 CAG CTA GAT GGC ACG TAT CCA CCA CCC GTC CAT GAC GAC AAT GTG TCT ATG 2296
 Gln Leu Asp Gly Thr Tyr Pro Pro Pro Val His Asp Asp Asn Val Ser Met 429
 GCT TCG TCT GGA GCC ACT CAA GCT GAA CTT ATG ACC TTA ACC ATT GTG AAA 2347
 Ala Ser Ser Gly Ala Thr Gln Ala Glu Leu Met Thr Leu Thr Ile Val Lys 446
 GGT GCC CAG GGA TTT GGC TTT ACT ATT GCC GAC AGT CCC ACG GGA CAG CGG 2398
 Gly Ala Gln Gly Phe Gly Phe Thr Ile Ala Asp Ser Pro Thr Gly Gln Arg 463
 GTG AAA CAA ATC CTT GAC ATT CAG GGA TGC CCT GGG CTG TGT GAA GGA GAC 2449
 Val Lys Gln Ile Leu Asp Ile Gln Gly Cys Pro Gly Leu Cys Glu Gly Asp 480
 CTC ATT GTT GAG ATC AAC CAA CAG AAT GTA CAG AAC CTG AGC CAT ACA GAA 2500
 Leu Ile Val Glu Ile Asn Gln Gln Asn Val Gln Asn Leu Ser His Thr Glu 497
 GTA GTG GAT ATA CTT AAG GAC TGC CCC GTT GGA AGT GAG ACT TCT TTA ATC 2551
 Val Val Asp Ile Leu Lys Asp Cys Pro Val Gly Ser Glu Thr Ser Leu Ile 514
 ATC CAT CGA GGA GGT TTC TTT TCT CCA TGG AAA ACT CCA AAG CCT ATG ATG 2602
 Ile His Arg Gly Gly Phe Phe Ser Pro Trp Lys Thr Pro Lys Pro Met Met 531

Fig. 17

GAC CGA TGG GAG AAC CAA GGC AGT CCA CAA ACA AGT TTA TCT GCT CCG GCC	2653
Asp Arg Trp Glu Asn Gln Gly Ser Pro Gln Thr Ser Leu Ser Ala Pro Ala	548
GTC CCA CAG AAC CTG CCC TTC CCA CCT GCC CTT CAC AGG AGC TCC TTT CCT	2704
Val Pro Gln Asn Leu Pro Phe Pro Pro Ala Leu His Arg Ser Ser Phe Pro	565
GAT TCA ACA GAG GCC TTT GAC CCA CGG AAG CCT GAC CCA TAT GAG CTC TAC	2755
Asp Ser Thr Glu Ala Phe Asp Pro Arg Lys Pro Asp Pro Tyr Glu Leu Tyr	582
GAG AAA TCG AGA GCC ATT TAT GAA AGT AGG CAA CAA GTG CCA CCC AGG ACC	2806
Glu Lys Ser Arg Ala Ile Tyr Glu Ser Arg Gln Gln Val Pro Pro Arg Thr	599
AGT TTT CGA ATG GAT TCC TCT GGT CCA GAT TAT AAG GAA CTG GAT GTT CAC	2857
Ser Phe Arg Met Asp Ser Ser Gly Pro Asp Tyr Lys Glu Leu Asp Val His	616
CTT CGG AGG ATG GAG TCT GGA TTT GGC TTT AGA ATC CTT GGG GGA GAT GAA	2908
Leu Arg Arg Met Glu Ser Gly Phe Gly Phe Arg Ile Leu Gly Gly Asp Glu	633
CCT GGA CAG CCT ATT TTG ATC GGA GCC CTC ATT GCC ATG GGC TCA GCT GAC	2959
Pro Gly Gln Pro Ile Leu Ile Gly Ala Val Ile Ala Met Gly Ser Ala Asp	650
AGA GAC GGC CGT CTA CAC CCA GGA GAT GAG CTT GTC TAT GTC GAT GGG ATC	3010
Arg Asp Gly Arg Leu His Pro Gly Asp Glu Leu Val Tyr Val Asp Gly Ile	667

Fig. 18

CCA GTG GCT GGC AAG ACC CAC CGC TAT GTC ATC GAC CTC ATG CAC CAC GCG 3061
 Pro Val Ala Gly Lys Thr His Arg Tyr Val Ile Asp Leu Met His His Ala 684
 GCC CGC AAT GGG CAG GTT AAC CTC ACT GTG AGA AGA AAG GTG CTA TGT GGA 3112
 Ala Arg Asn Gly Gln Val Asn Leu Thr Val Arg Arg Lys Val Leu Cys Gly 701
 GGG GAG CCC TGC CCA GAG AAT GGG AGG AGT CCA GGC TCT GTA TCA ACT CAC 3163
 Gly Glu Pro Cys Pro Glu Asn Gly Arg Ser Pro Gly Ser Val Ser Thr His 718
 CAC AGC TCT CCG CGC AGT GAC TAT GCC ACC TAC TCC AAC AGC AAC CAC GCC 3214
 His Ser Ser Pro Arg Ser Asp Tyr Ala Thr Tyr Ser Asn Ser Asn His Ala 735
 GCC CCC AGC AGC AAT GCC TCA CCT CCT GAA GGC TTT GCC TCA CAC AGC TTG 3265
 Ala Pro Ser Ser Asn Ala Ser Pro Pro Glu Gly Phe Ala Ser His Ser Leu 752
 CAG ACC AGT GAT GTG GTC ATT CAC CGC AAA GAA AAC GAA GGG TTT GGC TTC 3316
 Gln Thr Ser Asp Val Val Ile His Arg Lys Glu Asn Glu Gly Phe Gly Phe 769
 GTC ATC ATC AGC TCT CTG AAC AGG CCT GAG TCT GGA GCC ACC ATA ACT GTG 3367
 Val Ile Ile Ser Ser Leu Asn Arg Pro Glu Ser Gly Ala Thr Ile Thr Val 786
 CCC CAT AAA ATT GGA CGA ATC ATT GAT GGG AGC CCT GCA GAT CGC TGT GCC 3418
 Pro His Lys Ile Gly Arg Ile Ile Asp Gly Ser Pro Ala Asp Arg Cys Ala 803

Fig. 19

AAA CTC AAA GTG GGC GAC CGT ATC TTA GCA GTC AAC GGC CAG TCT ATC ATC 3469
 Lys Leu Lys Val Gly Asp Arg Ile Leu Ala Val Asn Gly Gln Ser Ile Ile 820
 AAC ATG CCT CAC GCT GAC ATT GTG AAG CTC ATC AAG GAC GCC GGT CTC AGT 3520
 Asn Met Pro His Ala Asp Ile Val Lys Leu Ile Lys Asp Ala Gly Leu Ser 837
 GTC ACC CTT CGC ATC ATT CCT CAG GAG GAG CTC AAC AGC CCA ACA TCA GCA 3571
 Val Thr Leu Arg Ile Ile Pro Gln Glu Glu Leu Asn Ser Pro Thr Ser Ala 854
 CCC AGT TCA GAG AAA CAG AGC CCC ATG GCC CAG CAG CAC AGC CCT CTG GCC 3622
 Pro Ser Ser Glu Lys Gln Ser Pro Met Ala Gln Gln His Ser Pro Leu Ala 871
 CAG CAG AGT CCT CTG GCC CAG CCA AGC CCC GCC ACC CCC AAC AGC CCA GTC 3673
 Gln Gln Ser Pro Leu Ala Gln Pro Ser Pro Ala Thr Pro Asn Ser Pro Val 888
 GCA CAG CCA GCT CCT CCC CAA CCT CTC CAG CTG CAA GGA CAC GAA AAT AGT 3724
 Ala Gln Pro Ala Pro Pro Gln Pro Leu Gln Leu Gln Gly His Glu Asn Ser 905
 TAC AGG TCA GAA GTT AAA GCG AGG CAA GAT GTG AAG CCA GAC ATC CGG CAG 3775
 Tyr Arg Ser Glu Val Lys Ala Arg Gln Asp Val Lys Pro Asp Ile Arg Gln 922
 CCT CCC TTC ACA GAC TAC AGG CAG CCC CCG CTG GAC TAC AGG CAG CCC CCG 3826
 Pro Pro Phe Thr Asp Tyr Arg Gln Pro Pro Leu Asp Tyr Arg Gln Pro Pro 939

Fig. 20

GGA GGA GAC TAC TCA CAG CCC CCA CCC TTG GAC TAC AGG CAG CAC TCT CCA 3877
 Gly Gly Asp Tyr Ser Gln Pro Pro Pro Leu Asp Tyr Arg Gln His Ser Pro 956
 GAC ACC AGG CAG TAC CCT CTG TCA GAC TAC AGG CAG CCA CAG GAT TTT GAT 3928
 Asp Tyr Arg Gln Tyr Pro Leu Ser Asp Tyr Arg Gln Pro Gln Asp Phe Asp 973
 TAT TTC ACT GTG GAC ATG GAG AAA GGA GCC AAA GGA TTT GGA TTC AGC ATT 3979
 Tyr Phe Thr Val Asp Met Glu Lys Gly Ala Lys Gly Phe Gly Phe Ser Ile 990
 CGT GGA GGA AGG GAA TAC AAG ATG GAT CTG TAT GTG TTG AGA TTG GCA GAG 4030
 Arg Gly Gly Arg Glu Tyr Lys Met Asp Leu Tyr Val Leu Arg Leu Ala Glu 1007
 GAT GGG CCA GCC ATA AGG AAC GGC AGG ATG AGG GTA GGA GAT CAG ATC ATT 4081
 Asp Gly Pro Ala Ile Arg Asn Gly Arg Met Arg Val Gly Asp Gln Ile Ile 1024
 GAA ATA AAT GGG GAA AGC ACA CGA GAC ATG ACC CAC GCC AGA GCA ATA GAA 4132
 Glu Ile Asn Gly Glu Ser Thr Arg Asp Met Thr His Ala Arg Ala Ile Glu 1041
 CTC ATC AAG TCT GGA GGA AGA AGA GTG CCG CTG CTG AAG AGA GGC ACG 4183
 Leu Ile Lys Ser Gly Gly Arg Arg Val Arg Leu Leu Lys Arg Gly Thr 1058
 GGG CAG GTC CCG GAG TAT GGA ATG GTA CCT TCC AGC CTC TCC ATG TGC ATG 4234
 Gly Gln Val Pro Glu Tyr Gly Met Val Pro Ser Ser Leu Ser Met Cys Met 1075

Fig. 21

AAA AGT GAC AAG CAT GGG TCC CCA TAT TTC TAC TTA CTG GGC CAC CCT AAA 4285
 Lys Ser Asp Lys His Gly Ser Pro Tyr Phe Tyr Leu Leu Gly His Pro Lys 1092
 GAC ACG ACG AAC CCC ACG CCT GGA GTG CTG CCG CCG CCC CAG GCC 4336
 Asp Thr Thr Asn Pro Thr Pro Gly Val Leu Pro Pro Pro Gln Ala 1109
 TGC CGG AAG TAGGCGTCTCCCTCGAAGACATCCTCTCTCCATTCTCTCCATCACCAGCCCC 4400
 Cys Arg Lys 1112
 ACCCTCCGACCCCTCCACACCATAGGCCACAGACCCAACTTGGGATATCCAAAGGGAACA 4460
 CGACGTTAGGAACCAAAGGAGCTTTCGGCCGGCGGCCAGAGAAGCAGCGCCTGGGGGA 4520
 GCAGAGGAGCGCTCGGGGAGCCCGCAGCGCAGTCCGCGGCCCAGGCTGGAGGAGGTGCC 4580
 CGCGGGCCAGGGGGCGCGGAGCGCGGAGCGCCCGCTCGGAGCGCGCCGACGGGAAGGA 4640
 GCGCGTCCGCGCGCGGTGAGGGCCTCGGGGCGCGCGCGCGCGCGGAGCGCCGAGGCCAA 4700
 GGTGGGTGTGCGCTCGGGGGCCCGACCCGACCGCGGCCACGGGGGGCGGCCAGCGCG 4760
 CAAGGCGACGATGGCGCGCGGGCCCTGGAAGGTGCCGGGCTCCGACAAAGCTGCCGGGCGC 4820
 CCTGCAGCCTGGGGCCTCGGGCGCGGGCAGATGAGCCCCAAGCGAGGGCCCCCGCCCG 4880
 CCTCCACGCGCGCATCTTCCCTGGTTCCGCTCTCAGCGCGTTTAAATTATTTCCTCACTG 4940
 TCACACGCATAGATCTATACGAGGCGCCGAAGCCCGGAGCGCGCGCGTCCGACGCGCGGT 5000

Fig. 22

AGGCGGCACGGTGTGCGCGCAGGCAGACCTAAACTGATCCTAAAGCCCCCGGTTT 5060
CATGGTGGGAGCTTTGGCAGCTACGGAAGAACCAGGCAACATCAGAGAGAGAC 5120
AGTGCAGTGTAGCTTTAGATTCAAAAAAATAAAAAA 5156

Fig. 23

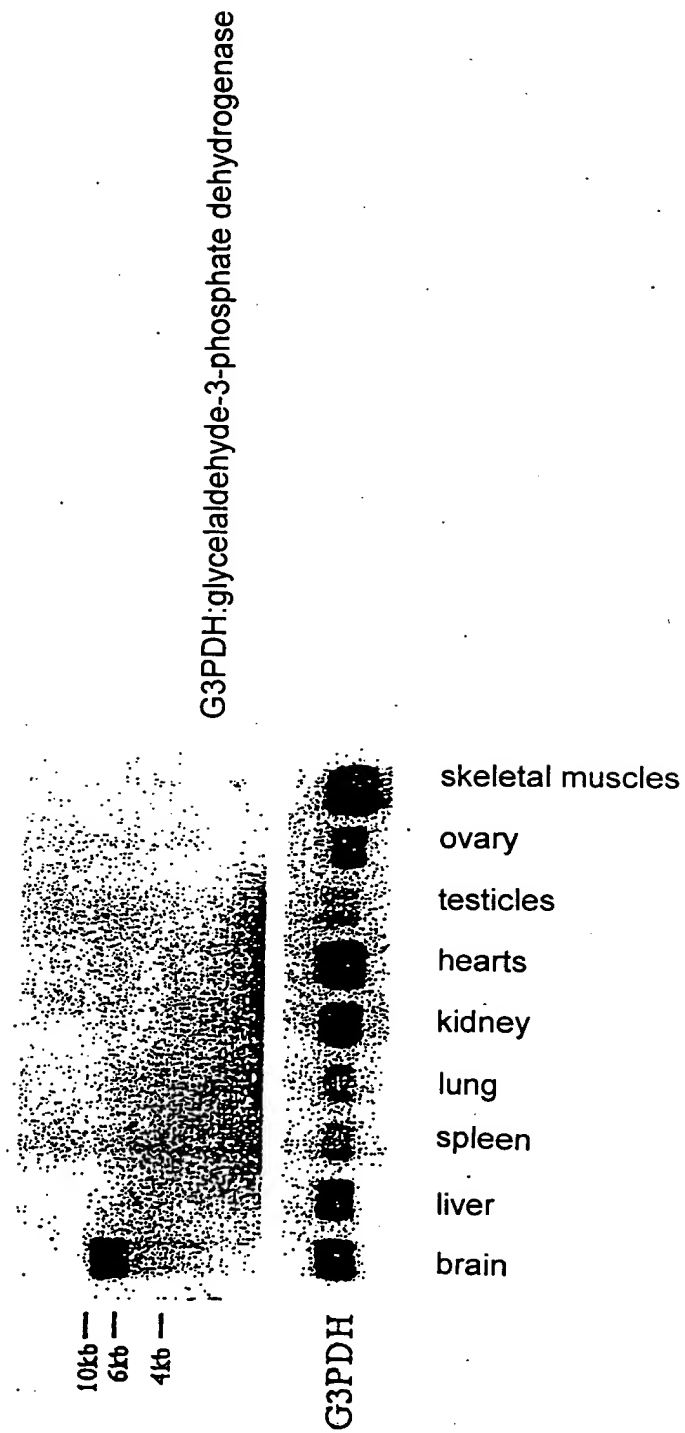


Fig. 24

